

REMARKS

In the Official Action, the Examiner rejected claims 1-32. Claims 25-32 have been cancelled without prejudice for possible inclusion in a continuing application. Accordingly, reconsideration of claims 1-24 is respectfully requested.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-24 under 35 U.S.C. § 103(a) as being unpatentable over Soukal (U.S. Pat. No. 6,035,328) in view of Budd et al. (U.S. Pat. No. 5,662,108). Specifically, the Examiner stated:

Soukal discloses a medical therapeutic and/or diagnostic system with a central server 8 and a plurality of workstations 9. Data transmitting acts as claimed is at least implied by Soukal. Soukal does not disclose the cardiac catheterization procedure. Budd et al. teaches that it is known to perform a cardiac catheterization procedure as specified in the claims. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the medical data processing system of Soukal in combination with a cardiac catheterization procedure and system, as taught by Budd et al., because this merely involve combining elements of art recognized suitability for an intended purpose. See MPEP § 2144.07.

Applicants respectfully traverse this rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion support the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes all of the claimed elements, but also present a convincing line of reasoning as

to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

The present application is directed to a distributed multi-user system for real time data access during cardiology procedures. Page 1, lines 10-11. More specifically, the present application is directed to an interactive computer network which can be used to simultaneously display and manipulate data from a cardiology procedure on a plurality of devices and at a plurality of locations. Page 1, lines 11-14. As stated in the background of the present application, an electrophysiology study (EPS) involves the pacing and recording of electrical signals within localized areas of the heart. Page 2, lines 6-7. To perform such procedures as an EPS, a cardiac catheterization lab is provided in which multiple clinicians can diagnose and treat heart conditions. Page 3, lines 27-29. It would be advantageous for clinicians to be able to interact with and manipulate the clinical data simultaneously during an EP procedure. Page 3, lines 30-32.

Current techniques to accommodate the complex workflow in a cardiac catheterization lab, such as the workflow required during an EP procedure, are insufficient to meet these needs. Page 4, lines 8-9. Prior techniques of decentralizing study data by publishing from a central location, *such as a server*, to multiple remote locations residing within the cardiac catheterization labs or

throughout a medical institution only provide for the distribution of data after all of the data is entered. Page 9, lines 20-23. Conversely, by implementing the presently described technique using merge replication, the electrophysiology data can be collected, replicated and simultaneously displayed *during* the cardiac catheterization procedure.

Accordingly, claims 1 and 13 each recite, in relevant part, a method of accessing a study record taken *during* a cardiac catheterization procedure, comprising the acts of transmitting data from a catheter to a data collection device, transmitting the data from the data collection device to a central publisher, replicating the data, transmitting the replicated data from the central publisher to a plurality of client workstations, and simultaneously displaying the data on the plurality of client workstations.

The Soukal reference does *not* disclose a method of accessing data during a cardiac catheterization procedure, much less replicating, transmitting and simultaneously displaying the data during the procedure. Conversely, the Soukal reference discloses “a medical therapeutic and/or diagnostic system with at least one operating means with allocated computing means and control means communicating therewith for controlling the operation of the system.” Col 1, lines 6-10. “Each operating means has computing means wherein a special software is filed which is directed to the respective medical-technical application for which it has been developed.” Col. 1, lines 18-21. “This special software is provided in each of the operating means, since each of the operating means works quasi-‘independently.’” Col. 1, lines 21-23. “Besides the inflexibility of this system, a further disadvantage is that to modify the stored software, the modification must be recorded individually for each operating means, which is cumbersome and time-consuming.” Col.

1, lines 24-27. “In contrast to known systems, at least part of the operating and/or processing data previously stored in the computing unit of the operating means, i.e., the system’s specific technical software, is not stored there anymore, but rather is only implemented in the control means, which delivers the software to the operating means only as needed, such as in the startup of the operating means or the like.” Col.1, lines 40-47.

Thus, the Soukal reference is directed to a system that permits the sharing of the *operating software* as opposed to the *data acquired* during a test procedure. The Soukal reference is not directed to the sharing of test data, at all, but rather to the sharing of operating software. Even if the Soukal reference did disclose a system for sharing test data, the Soukal reference does not disclose replicating the data, transmitting the replicated data from a central publisher to a plurality of client workstations or simultaneously displaying the data on the plurality of client workstations, as recited in the present claims. Rather, the Soukal reference discloses a mechanism (control unit 8) for sharing the software necessary to conduct the test procedure, whether it be internally (at operating units 4 and 6) or externally (at operating units 9 or 11).

The Examiner submits that the replicating feature recited in the present claims is inherent in the Soukal reference, because the Soukal reference discloses a control unit 8 which acts as an HTTP-server. *See* Response to Arguments section of the Official Action. Applicants traverse the assertion. Applicants are well aware that express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under Section 103. However, Applicants are also well aware that the Examiner bears the initial burden of proving inherency and that this burden has not been met by the Examiner’s unsupported assertions. The fact that a certain result or

characteristic *may* occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijeckaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993); MPEP § 2112. In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the termination that the alleging inherent characteristic *necessarily* flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990); MPEP § 2112.

Specifically, Applicants respectfully submit that the replication, transmission and simultaneous display of data during a cardiac catheterization procedure is not inherent, nor does it necessarily follow from the system disclosed in the Soukal reference. Conversely, prior techniques of decentralizing study data by publishing from a central location, *such as a server*, to multiple remote locations residing within the cardiac catheterization labs or throughout a medical institution are insufficient, because they only provide for sharing data after all of the data is entered, as explicitly discussed in the present application. Page 9, lines 20-23. Even if the system disclosed in the Soukal reference could be implemented during a cardiac catheterization procedure, and even if system were implemented for data distribution, it is clear that at best, the control unit (HTTP-server) 8 would only allow for data distribution after the procedure. Further, while Applicants respectfully submit that the control unit 8 cannot even perform the recited acts in real time (i.e. during the cardiac catheterization procedure), even if it could, inherency cannot be established by probabilities or possibilities -- the mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Olerich and Divigard*, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981). Because it is clear that replication, transmission and simultaneous display of data during a

cardiac catheterization procedure does not *necessarily* flow from the teachings of the Soukal reference, these elements cannot possibly be inherent.

Because the Examiner has not met this required burden of proof, the Examiner has failed to make out a *prima facie* case of inherency. As clearly appreciated by the Examiner, while the Budd et al. reference may disclose a cardiac catheterization procedure, it does not disclose replicating the data, transmitting the replicated data from a central publisher to a plurality of client workstations or simultaneously displaying the data on the plurality of client workstations. Thus, the Budd reference fails to cure the deficiencies described above with respect to the Soukal reference. Therefore, the cited combination does not even disclose all of the claimed elements, much less provide any suggestion to combine these disparate teachings to render the claimed subject matter obvious.

In view of the remarks set forth above, Applicants respectfully submit that the subject matter of claims 1-24 is not rendered obvious by the cited combination. Accordingly, Applicants request withdrawal of the Examiner's rejection and allowance of claims 1-24.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request reconsideration of the Examiner's rejections and allowance of claims 1-24. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

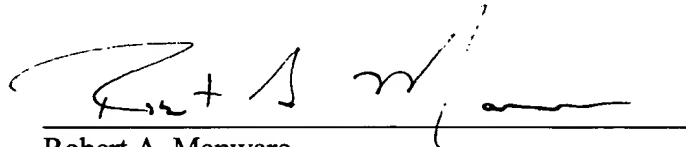
General Authorization for Extensions of Time

In accordance with 37 C.F.R. § 1.136, Applicants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefor.

Furthermore, Applicants authorize the Commissioner to charge the appropriate fee for any extension of time to Deposit Account No. 06-1315; Order No. GEMS:0096/FLE (31-CD-5622).

Respectfully submitted,

Date: January 22, 2003

A handwritten signature in black ink, appearing to read 'R. A. Manware', is written over a horizontal line.

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